

UDOT University College of Operations Academic Business Plan

Part I – Vision and Mission Statements

Vision Statement:

UDOT University, and the College of Operations as an integral part thereof, will become an outstanding educational system that is fully integrated into UDOT's culture, ensuring an exceptionally knowledgeable, diversely talented, and broadly experienced workforce. **Mission:** UDOT University College of Operations will help accomplish this in the following ways:

- by providing quality educational opportunities to both UDOT employees and where appropriate, our external partners, through a well-organized training infrastructure.
- 2. by monitoring and assessing department training and educational needs in real time, with a particular focus on UDOT core competencies,
- 3. by addressing needs through development of training and educational programs, and,
- 4. by making available appropriate incentives and rewards for successful completion of training programs.

Part II - Setting the Stage

In this section we identify: 1) who we teach, 2) what we teach, and 3) how we do it. We then identify our strengths and weaknesses, and discuss how we hope to expand upon that base, by identifying who we hope to train, and how we plan to do it.

The College of Operations consists of the following departments, or areas of learning:

- Emergency Management
- Equipment
- Motor Carriers
- Maintenance
- Traffic Operations
- Traffic and Safety
- Aeronautics.

Additionally, the Department of Construction, part of the College of Project/Program Delivery, is intimately connected with the Department of Maintenance. The two



departments work together to deliver needed training for the Transportation Technician program. This effort is known as the Transportation Education Program (TEP).

Following are discussions specific to each department:

- 1. Emergency Management
 - a. Who we presently train

The School of Emergency Management categorizes students into four areas. These are:

- Emergency Management Leader filling Command and General Staff positions in the UDOT EOC, or Region Area Command Centers.
- Field Incident Command Leader Performing Command roles at specific field locations as Incident Commander or Unified Command.
- Field Support Personnel Field Responders filling expanded roles supporting an incident scene or operation.
- Staff Support Personnel All other employees that are not specifically predesignated to a response role, but who wish to learn the basic framework and be willing to be called into a variety of support roles.

b. Presently offered training topics

Students will learn basic concepts and awareness of Emergency Management, UDOT's mission plans, position specific training, and advanced curriculum for developing key leadership assignments.

c. How do we do it?

Students will be taught primarily in a classroom or computer lab settings. There may need to be field sessions and/or tours integrated as well.

d. Strengths

Nearly all courses are already developed by FEMA, and others. Several courses are online, or are free to obtain material, other than copying costs.

It is easy to graduate staff to be instructors, and there are instructors available locally for free. There are also instructors available through contracts that can support workload, location, and schedule challenges.

e. Weaknesses

Most classroom delivered course material must be edited or streamlined, and customized to include UDOT-specific content. In most cases, this will deny obtaining official FEMA course credit. However, this is only necessary for certain courses and certain staff.



f. Who do we hope to train?

Some of the training described above is already offered, while some describes our hope for the future. The plan for both presently offered training and for future training is the same.

- g. How do we plan to do it?
- 2. Equipment
 - a. Who we presently train
 - b. Presently offered training topics
 - c. How do we do it?
 - d. Strengths
 - e. Weaknesses
 - f. Who do we hope to train?
 - g. How do we plan to do it?
- 3. Motor Carriers
 - a. Who we presently train
 - i. Current Port of Entry (POE) Agents
 - ii. Temporary POE Agents
 - iii. Division administrative support personnel
 - iv. Division Leadership
 - v. Potential and newly hired employees (before their field assignment)
 - vi. Industry Partners and Customers
 - b. Presently offered training topics
 - i. Size and weight topics as applied in the trucking industry
 - ii. Safety and protection matters as they relate to driving the State's highways with the Public
 - iii. Customer Service courtesy concepts
 - iv. Regulation and statute enforcement
 - v. Communication skills
 - vi. An almost endless array of detailed stuff
 - c. How do we do it?
 - i. Tie training and development to the organization's business model



- ii. Employ Subject Matter Expert (SME) contractors such as National Training Center, the training arm of the FMCSA
- iii. Design and create specific training to meet a specific performance deficiencies
- iv. Use resources like Utah Leadership Institute (ULI)
- v. Use technology to span the remote location situation the MCD has with 10 sites and employ an extensive e-learning initiative
- vi. Develop mentoring or on the job training opportunities
- vii. Follow the established Training Request Process outlined in Policy
- viii. Measure results from at least five perspectives
 - 1. Productivity
 - Customer satisfaction
 - 3. Efficiency
 - 4. Morale
 - 5. Cost avoidance (for Government, otherwise profitability)

d. Strengths

- i. SMEs on staff
- ii. Some money
- iii. Interactive technology capability available at most sites

e. Weaknesses

- i. Organization
- ii. Delivery conduit
- iii. Inability to maximize the technology to deliver training due to the lack of needed training
- f. Who do we hope to train?
 - Everyone interested in continuous improvement both internally and externally
- g. How do we plan to do it?
 - i. Organize ourselves and our college
 - ii. Collaborate with other Colleges that may have similar curriculum
 - iii. Investigate and consult with other Agencies concerning what they may have done with a similar approach to training

4. Maintenance (including TEP)

a. Who we presently train

Our primary focus is on the Transportation Technicians throughout the state; however, we also provide First Aid/CPR training, Van Training, etc. to others in the department.

b. Presently offered training topics



Training is offered in a variety of topics. See the College of Operations Course Listings and Descriptions for details.

c. How do we do it?

We have UDOT Trainers who provide much of the training, both in the TEP program and otherwise. We also contract with Salt Lake Community College to provide Math and English classes for TEP. We also rely on some of the Equipment retailers to provide some of the training on new equipment.

d. Strengths

We have Trainers on staff who are experienced in Maintenance. Central Maintenance supplies a Budget which allows us to meet most of our identified needs

Our training program has solid support from Senior Leadership. We are always actively looking for ways to continually improve the current program.

e. Weaknesses

The demand for training is continuous. At times the manpower to provide training is stretched too far.

f. Who do we hope to train, and how do we plan to do it? There seems to be a lack of training for new employees, particularly in the areas of liability training. We are currently working with Risk Management to see what we can do to help support their efforts to provide more liability training to all employees in the Department.

5. Traffic Operations

a. Who we presently train

We presently have a formal training program for Electronic Technical Specialists.

b. Presently offered training topics

Topics include, but are not limited to, electrical construction and maintenance, electrical safety and codes, traffic control for maintenance and construction, maintenance of traffic signals, fiber-optic construction and maintenance, UDOT Standard Drawings and Specifications, basics of Manual of Uniform Traffic Control Devices, construction and inspection of traffic signals, operation and timing of traffic signals, maintenance of highway lighting, and maintenance of advanced traffic management systems.



c. How do we do it?

We are paying a consultant to prepare and teach the classes. Classes are generally 4 or 8 hours.

d. Strengths

- Classes are taught by a former UDOT employee with hands-on practical experience.
- The instructor has credibility with technical personnel.
- Small class sizes allow for hands-on training. For example, in one class, students used instruments to perform tests and make cable splices in class.
- The training schedule and course content are flexible and can be adjusted as needed. We work with an advisory committee of UDOT employees to guide the program.

e. Weaknesses

- It is very expensive. We don't have the budget to sponsor as much training as we would like.
- It is highly dependent on the unique experience of one consultant employee. There is no back-up plan if that employee takes another position or retires.
- Procurement of the desired training services is not simple. This was considered a bid, not a qualifications-based consultant selection.
- It is difficult to establish the appropriate level in classes when we have a
 mix of new employees who need very basic training and veteran
 employees who are looking for very advanced training and everyone in
 between.
- Most of our UDOT engineers and trans techs would benefit from some of the topics being taught. However, this program is not tailored for them. We don't have the room in the classes, and we couldn't possibly afford it in the way that we are providing the training now.

f. Who do we hope to train?

In addition to continuing and improving the current program to train electronic technicians, we should have formal training for other UDOT traffic engineering staff, IMT personnel, as well as other UDOT engineers and Transportation Technicians.

It would be valuable to have a formal advanced training program for all traffic



engineering staff and all IMT employees. Some UDOT employees move into traffic engineering or IMT positions with little or no background in traffic operations.

It would also benefit other UDOT engineers and Trans Techs to have some additional training on basics of traffic operations which would be valuable to UDOT in design, construction, and maintenance.

g. How do we plan to do it?

We have the understanding of the training needs, and the technical knowledge that should be conveyed. A substantial commitment of resources is required to implement a training program as envisioned below. Without additional resources, we can only continue the current program at a reduced level.

6. Traffic and Safety

a. Who we presently train

Traffic and Safety Division offers training to UDOT Transportation Technicians, UDOT designers, and to private contractor and consultant personnel.

b. Presently offered training topics

The general topics of training include

Crash attenuators
Guardrail installation

Crash barriers

Flagging

Traffic Control.

Please see the College of Operations Course Listings and Descriptions for specific details.

c. How do we do it?

We use internal staff to provide training on guardrail installation and certification. We use equipment vendors to provide training on their specific products and systems. We employ private training companies, certified by UDOT, to teach flagging and traffic control courses. Training in all areas is provided at least once per year.



d. Strengths

We have good UDOT instructors, and great internal subject matter knowledge. For training from outside sources, we have a good competitive pool of private training providers.

e. Weaknesses

A weakness is that there is too much demand for training, from our limited resources. Another challenge is with record keeping. And just the logistics of providing training presents another challenge.

f. Who do we hope to train?

We hope to train everyone involved with implementing safety, both internally and externally.

g. How do we plan to do it?

We will organize ourselves and our college. We will collaborate with other Colleges that may have similar curriculum, and we will review other state training programs, and take advantage of their strengths.

7. Aeronautics

- a. Who we presently trainMechanics and pilots specialized training
- b. Presently offered training topics none except listed above
- c. How do we do it? Bid out...
- d. Strengths
 Safe and excellent trained pilots and mechanics
- e. WeaknessesNo training available
- f. Who do we hope to train? Maybe engineers and office person
- g. How do we plan to do it? Not sure?



Part III – Strategies for Success

Strategy #1 (what we want to do):

In the area of Maintenance Training, our strategy is to give all our Transportation Technicians the knowledge, skills and abilities to excel in their job responsibilities. Initiatives (how we're going to do it, specific):

- Continually work with Senior Leadership to ensure that we have the funding necessary and the support necessary to continually improve our training program.
- 2.
- 3.

Strategy #2 (what we want to do):

In the area of Traffic and Safety, we will develop a knowledgeable workforce for the proper design, construction, and maintenance of safety devices and processes. Initiatives (how we're going to do it, specific):

- 1. Establish sufficient funding to meet the training needs.
- 2. Maintain a commitment to training and development in the organization.
- 3. Provide opportunities for continuous learning and training.

Strategy #3 (what we want to do):

In the area of Motor Carriers, equip individuals with the learning competence to keep their knowledge, skills and abilities current so they may more effectively keep pace with the dynamic rate of change in a progressive work environment. Initiatives (how we're going to do it, specific):

- 1. Establish sufficient funding to meet the learning needs of the organization.
- 2. Maintain an explicit commitment to training and development in the organization as displayed in a specific plan.
- 3. Foster an open learning attitude among leaders.
- 4. Make continuous learning a performance measurement for individuals, including leadership.
- 5. Reward individuals who have the interest and willingness to learn with opportunities to do so.
- 6. Provide incentives, where possible, for continuous learning and training.

Strategy #4 (what we want to do):

In the area of Emergency Management, the School of Emergency Management will prepare UDOT employees and contractors to respond to and support UDOT missions for emergencies, disasters, and planned special events.

Initiatives (how we're going to do it, specific):



- 1.
- 2.
- 3.

Strategy #5 (what we want to do):

In the area of Traffic Operations, the following objectives and initiatives apply: **Objectives**

- 1. Train all UDOT electronic technicians on construction and maintenance of all electronic traffic control equipment.
- 2. Train all UDOT civil engineers in basic traffic engineering principles and applications.
- 3. Train all UDOT traffic engineers in advanced traffic engineering principles and applications.
- 4. Train all Incident Management Specialists on advanced topics in incident management and traffic control.
- 5. Train all Transtechs on basics of electrical construction and maintenance and traffic engineering principles that will be of value in their duties.

Initiatives (how we're going to do it, specific):

- 1. Conduct literature review, survey of other state DOT's, internal assessments within UDOT, and/or review of FHWA recommendations to identify potential core competencies and skills desirable for each category of personnel.
- 2. Establish core competencies required for each category of personnel. Two examples are given below.

Examples for electronic technicians:

- Electrical construction and maintenance
- Electrical safety and codes
- Traffic control for maintenance and construction
- Maintenance of traffic signals
- Fiber-optic construction and maintenance
- UDOT Standard Drawings and Specifications
- Basics of Manual of Uniform Traffic Control Devices
- Construction and inspection of traffic signals
- Operation and timing of traffic signals
- Maintenance of highway lighting
- Maintenance of advanced traffic management systems
- Traffic signal detection



Examples for advanced training of traffic engineering personnel:

- Freeway traffic flow theory
- Intersection traffic flow theory
- Highway capacity analysis freeways, ramps, weaving sections
- Highway capacity analysis intersections
- AASHTO Green Book Policy on Geometric Design of Streets and Highways
- Advanced topics in the MUTCD signing, pavement markings, traffic signal design
- Traffic incident management
- Traffic laws and codes
- Traffic simulation models
- Statistical methods
- Principles and application of access control
- Advanced timing and operation of traffic signals
- · Basics of electrical construction and maintenance
- Design of highway lighting
- Traffic signal coordination
- Advanced traffic management systems
- 3. Establish testing and certifications standards for each category of personnel.
- 4. Identify core competencies and certifications required for hiring and advancement and promotion to various classifications within each category of personnel.
- 5. Identify optimal training methods (in-house, national organizations, universities, consultants, etc.)
- 6. Identify efficient approach to training personnel who begin with varying levels of knowledge and experience.
- 7. Determine costs, personnel resources and budget for training and for administration of and oversight of training.
- 8. Determine approach to provide equivalent training for city, county, consultant, contractor, and vendor personnel.
- 9. Determine approach to handling vendor training related to specific products.
- 10. Implement record-keeping system to track details of education accomplishments and certifications.

Strategy #6 (what we want to do):

Initiatives (how we're going to do it, specific):

1.



2.

3.

Strategy #7 (what we want to do):

Initiatives (how we're going to do it, specific):

- 1.
- 2.
- 3.

Part IV - Required Resources

Resources

(funding sources, facilities, etc.)

Part V - Benchmarks

Benchmarks (scorecard)

(Measurements; e.g. number of courses, students, supervisor evaluation?, course evaluation—to track course quality, written test?)

Part VI - Appendices

Appendices

Course Descriptions Course Syllabi



Appendix A Course Listings and Descriptions



UDOT University College of Operations List of Courses Available for Academic Year 2011-2012

Department of Maintenance

1. Transportation Education Program (TEP)

UDOT's Transportation Education Program (TEP)

The purpose of TEP is to train UDOT's Transportation Technicians to work on both construction and maintenance projects. The objective is to improve the knowledge, skills and abilities of this workforce so they can move between the two activities.

TEP SUMMARY

The TEP program is made up of three sections. The first section is the Transportation technician academy; this is two weeks of training on maintenance and construction skills. The transportation technician academy is held twice a year in the spring and fall. This is the only required part of TEP. The second section of TEP, are the Long courses, which are general Math and English classes. These classes start in November and go through March of each year. These classes are given each week, and are done by, streaming video or by DVDs. The students can choose to do these classes from a PC by streaming video or on DVDs, which can be viewed on any TV set with a DVD player. The third section of the TEP program is the short courses, which are web-based classes focused on specific construction and maintenance topics. These classes are offered from April to June each year.

The transportation technician academy must be completed in the first year of employment. The TEP long and short courses are broken into four levels. Employees can take one level each year. This means they get one year of training with each year of experience.



TEP COURES BY YEAR AND LEVEL

Level 1 TEP Classes-Year one

Transportation Tech I

Transportation Tech Academy WEEK ONE

Safety Risk Management **Hazardous Materials** Vegetation Management Traffic Control/Flagging

Structures

Construction 101 Documentation Materials 101

Quality Assurance Program

Sampling testing/Concrete training

Civil Rights

Visual Inspection Process

Small Tool Safety

Trucks

Department Standards

Level 1 TEP Classes

Transportation Tech I

English-I

Math-I Plan Reading-A

Materials-A

Inspection and Documentation-A

Environmental

Level 2 TEP Classes-Year Two

Transportation Tech I, Complete level 2 TEP, can be promoted to Trans Tech II

English-II Math-II

WEEK TWO

Winter Operations

Motor Carriers/Truck Inspection

Tar Pot/Crack Sealer/Compressor

one and half days Equipment Training.

Loaders/Trailers

Tractors/Mowers

Defensive Driving

Half day Materials Training

Radios

Backhoe

Plan Reading-B

Structures Survey-A Materials-B



Inspection and Documentation-B

Level 3 TEP Classes-Year Three

Transportation Tech II
Upon completion of level 3 employees can
apply for engineering tech III and
maintenance lead jobs

English-III
Math-III
Survey-B
Inspection & Documentation-C
MMQA_A
OMS
Word 2000-A
Excel 2000-A

Level 4 TEP Classes-Year Four

Upon completion of level 4 employees can apply for engineering tech IV and maintenance station and area supervisor jobs
Inspection and

English-IV Power Point MMQA-B

Equipment Management

Word 2000-B Excel 2000-B

TEP Course Descriptions

TEP YEAR 1/Level 1

Documentation-D

English-I

Basic English and Grammar (Long Course)

Math I

Fundamentals of mathematics, this class is for math basics include whole numbers, prime numbers, fractions, decimals and measurements. This is a preview of Algebra. (Long Course)

Plan Reading-A

Basic Plan Reading. Students will study a set of UDOT plans for a structure on I-15. The course will be used to build a foundation for the understanding of the various concepts used to graphically represent a construction project. (Short Course)



Materials-A

Be able to find reference standards, become familiar with Quality Assurance Concept, develop background in measurements and calculations of materials. Understand highway material terminology, basics of aggregates, random sampling and sampling techniques. (Short Course)

Inspection and Documentation-A

This is the beginning class and covers payrolls, PR-1391, vehicle report, training reports, checking books, and adding tickets. Trucks and over weights, chapters 1&2 of manual of instruction on office administration, sections 100 & 200 of the Standard Specifications. Measuring and weighing trucks, weight tickets, labeling and indexing field books. Introduction to special provisions, traffic control, diaries, partnering and lines of authority. (Short Course)

Environmental

This course will introduce you to environmental issues and how they relate to UDOT construction and maintenance projects. This class covers the importance of protecting our environment and protecting important environmental resources. This class will also cover the UDOT environmental study process, required permits, clearances and the basic principles of erosion and sediment control. (Short Course)

TEP Level 2/Year 2

English II

This course is to improve grammar and writing skills. Designed to familiarize students with the functions of elements of a sentence, including dependent and independent clauses. The use of noun clauses and the correct usage of punctuation. The student will learn to recognize the types of errors associated with an incomplete understanding of these sentence structures. (Long Course)

Math II

This is an introductory course to algebra. Areas of study include percentages, ration and proportions, rectangles, triangles and basic graphs.

(Must have passed Math I with a C or better.)(Long Course)

Plan Reading-B



This is the second class in Plan Reading. This class builds on the knowledge gained from Plan Reading-A. This class will be the study of a more complex UDOT Project. (Short course)

Structures

This course is intended to give students a basic understanding of structures, primarily bridges. This class covers Quality Assurance/Quality Control (QA/QC), different types of bridges and how they are built. Bridge inspection and how to maintain bridges is also covered. (Short Course)

Survey-A

This is the beginning survey class covering survey overview, units of measurement, basic definitions and horizontal measurement. This class also covers survey stake interpretations, percent of grade, elevations and transferring elevations. (Short Course)

Materials-B

This is the second materials course and it covers each of the major materials used by UDOT. This class will cover definitions, acronyms, and useful properties of materials used by UDOT. It will also cover where we use the material, why we use it, where it comes from, testing, and safety issues. (Short Course)

Inspections and Documentation-B

This course will introduce correspondence, change orders, subcontract agreement, stockpile requests and payments. It will also cover procedures for the Orange Inspector's Manual. (Short Course)

TEP Level 3/Year 3

English III

This course is designed to develop students writing skill with an awareness of audience and purpose, to gain a better understanding of the role writing plays in your lives and careers. The text used is, *The least you should know about English*. (Long Course)

Math III

This course is an introductory class to geometry and trigonometry. Focus areas include triangles, regular polygons, circles, solids, area and volume. The text used is *Mathematics for Technical and Vocational Students*. (Long Course)

Survey-B



This course will cover how a surveyor uses equations, computations, and tools to create workable information for project designers and construction surveyors. Will also cover how to gather field information that when turned over to construction surveyors, will be able to lay out a project that will meet UDOT specifications. (Long Course)

Inspections and Documentation-C

This level of Inspection and Documentation focuses on Federal-Funded projects. It's important to know if a project is Federal-Funded, because of the additional federal regulations. If federal regulations are not followed UDOT could lose federal funding on projects. Some of the subjects covered are, specific equal employment opportunity, DBE commitment, contractors affirmative action plan, and project goals. (Short Course)

MMQA-A

This class covers the history and purpose of MMQA+ program. The class is designed to help employees understand the MMQA+ data collection process and how to collect data for MMQA+. Students will study the inspection manual and learn terminology used in MMQA+. (Short Course)

OMS

This class covers the Operations Management System (OMS) which is a computer-based system used by the UDOT maintenance division for managing equipment, labor and materials. The MMS system is used for work scheduling using activity codes. It combines equipment, labor, and materials for reporting costs associated with maintenance activities. This course will cover the main parts of the MMS system, including system access and navigation, work scheduling, budgets, reporting and T-91 processing. (Short Course)

Word 2000-A

This course will cover the basic skills used as you create and edit documents in Microsoft Word. It covers how to select and edit text and how to apply basic formatting using a variety of methods. The course covers formatting paragraphs, setting margins and printing options, setting tabs and creating tabbed columns. (Short Course)

Excel 2000-A

This course covers the basic skills used in excel spreadsheets, menu bar, toolbar, selecting and editing cells. Working with workbooks and worksheets. (Short Course)

TEP Level 4/Year 4

English IV



This class is designed to give students a better understanding of the role writing and communication play in the work place. Both technical writing and professional communication are a necessary part of every job. The text used is, *Effective Technical Writing*. (Long Course)

Math

This class is the second half of the Introduction to Geometry and Trigonometry. (Long Course)

MMQA-B

In this level of MMQA students will be learning how to enter data into the MMQA system. They will learn how to get a login and log onto the system. The students will be required to fill out a snow form and enter the data into the MMQA system. They will also be required to enter data for shoulder work, weed and rest area inspections. (Short Course)

Equipment Management

Every activity in operations requires some kind of equipment, whether it's a snowplow or pick-up it must be tracked and maintained. Some of the areas covered by this class are, equipment numbering system, equipment accounting and budgeting, use of state Gascard and how to read and interpret a Cost and Exception report. (Short Course)

Inspection and Documentation-D

This course revolves around a fictional UDOT construction project. The class will use the Project Home Page as the class. Assignments will include forms from the UDOT website, reading materials for proper documentation, and becoming familiar with PDBS (Project Development Business Systems)(Short Course)

Word 2000-B

This is a continuation of the Word 2000-A class moving into some of the advanced features of Word 2000.

Excel 2000-B

This is a continuation of the Excel 2000-A class moving into some of the advanced features of Excel-2000.

Recommended Time for TEP Classes

Employees will be given work time for classes or paid for time. If employees are allowed to do TEP classes at home they will be paid at there current rate of pay for each hour worked, up to the hours given for each class.



TEP SHORT COURSES-WEB BASED- APRIL-MAY OF EACH YEAR

- Construction Inspection & Documentation A=6 hours
- Construction Inspection & Documentation B=6 hours
- Construction Inspection & Documentation C=6 hours
- Construction Inspection & Documentation D=6 hours
- Environmental=6 hours
- Equipment Management=4 hours
- Materials-A=6 hours
- Materials-B=6 hours
- MMQA-A=4 hours
- MS Excel-A=4 hours
- MS Excel-B=4 hours
- MS Word-A=4 hours
- MS Word-B=4 hours
- Plan Reading-A=6 hours
- Plan Reading-B=6 hours
- Structures=6 hours
- Survey-A=8 hours
- Survey-B=8 hours
- MMS=4 hours

TEP LONG COURSES-GIVEN ON STREAMING VIDEO, DVDs NOVEMBER TO MARCH (region-2 can attend classes)

- MATH-1=22.5
- MATH-II=22.5
- MATH-III=22.5
- ENGLISH-I=22.5
- ENGLISH-II=22.5
- ENGLISH-III=22.5
- ENGLISH-IV=22.5

TEP Review Board

The function of the TEP review board is to address issues concerning the TEP program, in regards to placement of students who have attended other UDOT training such as M3



or T3, college classes, or other training, which would be the equivalent of a TEP class. The board will also serve to settle employee and instructor disputes, over grades, conduct or other issues. The board will be comprised of the following personnel.

Ira Bickford-Maintenance Operations Manager Mike Garcia- Construction Training Specialist Region Trainers:

Region-1 - Alan Neilson Region-2 - Ed Layton Regeion-3 - Steve Carnasecca Price District - Rod Asay Richfield District - Brent Beach Cedar District - Gary Cleveland

2. Other Training Offered by Maintenance Division (Not part of TEP, by Subject Area)

First Aid/Medical/Safety

Course Name: First Aid

Description: Basic First Aid principles taught. Basic understanding of what to do in an emergency, what to do if someone is choking or having a heart attack or bleeding. What to do if someone is in shock, etc. We also cover basic information on the use of AEDs.

Time: This course lasts about 6 hours

Certification: Participants will receive a certificate . . . certifying that they have completed

the course. To keep current, this training must be received every 2 years.

Course Name: CPR

Description: Hands on CPR practice with dummies. Learn the principles of CPR and

practice.

Time: This course lasts about 2 hours.

Certification: Participants will receive a certificate. To keep current, this training must be

received every 2 years.

Course Name: Basic Life Support

Description:

Course Name: First Responder

Description:



Course Name: Wilderness First Aid

Description:

Course Name: Blood-borne Pathogens

Description:

Course Name: Fall Protection

Description:

Course Name: Respirator

Description:

Course Name: OSHA 10-hr Construction

Description:

Course Name: Fire Extinguisher

Description:

Course Name: Trench safety

Description:

Course Name: confined space entry training

Description:

Course Name: Eye Protection

Description:

Course Name: Hearing Conservation

Description:

Course Name: Slips, Trips, and Falls

Description:

Course Name: Electrical Safety

Description:

Course Name: Small Tool Safety

Description:

Course Name: Chain Saw Safety

Description:

Course Name: Welding Safety

Description:



Course Name: Distracted Driver

Description:

Course Name: Defensive Driving

Description:

Course Name: Defensive Driving Professional Truck Driver

Description:

Course Name: CDL Training (on the road)

Description: Licensing-required in-cab supervised training for CDL license holders

Course Name: Van Certification Training

Description: Participants learn, through watching a video and class discussion, defensive

driving principles when driving a 12-15 person van.

Time: This course lasts 4 hours

Certification: Participants will receive a certificate good for 2 years.

MMQA/OMS

Course Name: MMQA Reporting in OMS

Description: usually done either one-on-one or in very small groups, instruction in how to access and record MMQA measures in OMS. Almost always, this training includes

answering questions specific to the person or persons being trained.

Course Name: MMQA Field Reporting

Description: instruction in how to use the MMQA Inspection Manual for such topics as 1) how to determine if features are deficient or not, 2) correct interpretation of the guidance

in the manual, 3) proper timing of inspections, etc.

Course Name: OMS Work Orders

Description: Usually done either one-on-one or in very small groups. This instruction covers scheduling and work reporting policies and processes in OMS. Covers all the different ways work orders can be created including Work Requests, Service Requests and creating work orders from Plan. Training also covers Scheduling, Daily Log, Crews, Completion, Timesheet window and the timing of when data is transferred to Finet.

Course Name: OMS - Feature Inventory

Description: Usually done on an as need basis when person/s are ready to collect roadway features. In most cases this training is an overview of the process and best practices for the particular feature being collected.

Course Name: OMS Field Data Collection (FDC) unit



Description: Usually done either one-on-one or in very small groups. This instruction covers installation, setup, interfacing with server data and use of the off line application. Training will also include paring your GPS puck to your computer.

Course Name: OMS Plan Matrix

Description: Usually done either one-on-one or in very small groups. This instruction

covers preparing work programs and balancing budgets.

Course Name: OMS Activity Standards

Description: In most cases will be one-on-one training. Instruction includes an overview of labor, equipment and material cost interfaces and the process of customizing standards at a region and station level and criteria for deciding which activities to customize.

Course Name: Operations Analyst Training:

Description: Usually done one-on-one with a new Analyst. Training includes more advance OMS operations, ensuring correct reporting standards, station budget preparation and working with accounting staff to ensure data integrity.

Leadership/Management

Course Name: Supervisors Training

Description: Instruction on; Leadership skills, Presentation skills, Managing a Meeting,

Time Management,

Course Name: Train the Trainer

Description: Refresher skills in the following areas; Adult learning principals, Learners motivation tips, Presentation skills, Managing meetings, Creating presentations, etc..

Maintenance Operations

Course Name: Crash Cushion Training for Maintenance employees

Description: Instruction on proper methods of replacing and repairs of all crash cushions

Course Name: Attenuator maintenance and repair

Description: Identifying, inspecting and retaining crash cushions and impact attenuator

systems

Course Name: Guardrail installation and repair

Description:

Course Name: Vegetation Management



Description:

Course Name: Herbicide applicator training

Description:

Course Name: Grader operator training

Description: Grading, winging, blade replacement, scarifying, loading for transport

Course Name: Mower Operations

Description:

Course Name: Vactor operator training

Description:

Course Name: Vactor Camera Training

Description:

Course Name: Culvert Camera operation

Description:

Course Name: Sweeper operation training

Description:

Course Name: Blasting training

Description:

Course Name: crack sealing operator training

Description: Types of sealants, safety, proper crack preparation, installing sealant and

equipment safety.

Course Name: Housekeeping

Description:

Course Name: Flagger training

Description: How to flag, traffic control, tools, and equipment

Course Name: Traffic control supervisor training

Description:

Course Name: Traffic control maintainer training

Description: Identify proper devices to use, where and when they can be used, How to

set up and maintain temporary work zone traffic control devices



Winter Operations

Course Name: Snow School

Description: Annual training for all employees engaged in the snow plan

Course Name: Snowplow operator in cab training

Description: How to operate a snowplow, snow plow controls, wing plows

Course Name: Winter Operations

Description:

Course Name: tow plow operation training

Description:

Course Name: JOMA Plow Blade Training

Description:

Course Name: Snow Plow Simulator training

Description:

Course Name: Ground speed controller calibration training

Description: How to calibrate open- and closed-loop controllers, identifying when

calibration is needed and documenting calibration.

Course Name: Spreader calibration training

Description: How to calibrate material spreader boxes using stop watch, weighing scales

Course Name: Liquid Chemical anti-icing training

Description: AASHTO/APWA CBT module. Identify chemicals, learn how to handle and mix them, when to apply, when not to apply, safety in handling, storage and testing.

Course Name: Fog dispersal and fog dispersal equipment training

Description: When and how to use mobile fog dispersal equipment. Safety precautions

and equipment maintenance

Course Name: Selecting Anti-icing and Deicing chemicals to mitigate environmental

impacts

Description: AASHTO/APWA CBT module

Course Name: Managing Snow and Ice Operations



Description: AASHTO/APWA CBT module Tools and processes used in planning, controlling and evaluating winter operations effectiveness.

Course Name: Winter equipment maintenance Description: AASHTO/APWA CBT module

Course Name: Snow and Ice Best Practices Description: AASHTO/APWA CBT module

Course Name: Blowing and Drifting Snow

Description: AASHTO/APWA CBT module. How to plow under drifting conditions;

planning, installing and maintaining snow fences

Course Name: RWIS data interpretation training

Description: Interpret RWIS reading, plan snowfighting operations based on RWIS

readings

Equipment Training

Course Name: Loader operation training

Description:

Course Name: Backhoe Training

Description:

Course Name: Grader Training

Description:

Course Name: Truck Training

Description:

Course Name: Crafco Crack Sealer

Description:

Course Name: Lock-out Tag Training

Description:

Course Name: Tractor Training

Description:

Course Name: Road Rake Training

Description:



Course Name: Crane Training

Description:

Course Name: Trailer Training

Description:

Course Name: Rigging

Description:

Course Name: Mini Excavator Training

Description:

Course Name: Shouldering Machine Training

Description:

Course Name: Hi-Lift Training

Description:

Course Name: Core Drill Training

Description:

Course Name: Bobcat Training

Description:

Course Name: Forklift Training

Description:

Course Name: Digger Derrick Training

Description:

Course Name: Tanker Trainer

Description:

Course Name: Broderson IC 250

Description:

Miscellaneous Maintenance Training

Course Name: Maintenance Orientation for new District Engineers

Description: an overview of maintenance functions, activities, processes, and available

resources. This training is given as needed when new District

Engineers or immediate staff undertake their new job duties, or as requested.

Course Name: Just in Time Maintenance & Construction training



Description: A wide variety of free training is available through NHI dealing with Maintenance and Construction activities.

Department of Motor Carriers Training Courses ~

National Training Center's (NTC) Catalog Contents by Group:

(A nationally recognized and contracted training provider for the FMCSA Division of the US DOT)

Audits & Investigations

Course # Name

550035 Advanced Drug and Alcohol Investigative Techniques

510003 Compliance Review

510004 Enforcement Procedures

510026 Household Goods Compliance and Enforcement

510022 New Entrant Safety Audit Course

510021 New Entrant Safety Audit Workshop

Hazardous Materials

Course # Name

530022 Cargo Tank Inspection

530001 General Hazardous Materials

530023 Other Bulk Packaging

Roadside

Course # Name

510001 North American Standard - Part A

510002 North American Standard - Part B

38162 North American Standard Level I Inspection Review

510009 Passenger Vehicle Inspection

Instructor

Course # Name

Course # Name

48161 Instructor Development

48160 Master Instructor Development

Audits and Investigations [550035] Advanced Drug and Alcohol Investigative Techniques

Prerequisites for Attendance: •Completed Academy or State Compliance Review Course. •Completed Enforcement Procedures course or have a minimum of 2 years of compliance review experience. •Completion of DOT/TSI Drugs and Alcohol; Keeping it Straight *Host agencies shall provide students with (or require students to bring) the most current version of



the Federal Motor Carrier Safety Regulations.

Target Audience: Federal and State MCSAP enforcement personnel responsible for conducting Compliance Reviews and New Entrant Safety Audits.

Description: Provide an advanced understanding to compliance/enforcement personnel in applying the proper authority, applicability, and enforcement to all drug and alcohol testing situations. This course will focus on the drug and alcohol testing compliance requirements of 49 CFR Part 382, as applied to motor carriers. It will emphasize the regulatory requirements and identify how to identify violations through required records and service agents hired by the motor carrier. Applicable policies and interpretations will be highlighted to increase the investigator's ability to properly assess a motor carrier's compliance. The course will address those areas of Part 40 that directly correlate to the responsibilities of the motor carrier. Discussion topics include: Enforcement strategies, policies, interpretations, and drug and alcohol noncompliance trends.

Objective: The objective of this class is to provide safety investigators and auditors greater knowledge of the drug and alcohol testing program, and expanded tools/skill sets resulting in an increased scope of Part 382 violations discovered during a compliance reviews and new entrant audits; as well as more uniformity in the use of Parts 382 nationwide.

Length: 24 hours

[510003] Compliance Review

Prerequisites for Attendance: Successful completion of North American Standard Part A, North American Standard Part B and General Hazardous Materials courses. Working knowledge of computer software/hardware. Host agencies shall provide students with (or require students to bring) the most current version of the Hazardous Materials Regulations and Federal Motor Carrier Safety Regulations.

Target Audience: Federal and State MCSAP personnel responsible for conducting Compliance Reviews.

Description: A Compliance Review is an in-depth review of a motor carrier's compliance with the applicable safety/hazardous materials regulations. This course is designed to prepare investigators to conduct investigations and complete a quality Compliance Review in accordance with the Federal Motor Carrier Safety Regulations and Hazardous Materials Regulations while applying the investigator standards of the Field Operations Training Manual. Participants will be instructed in applicable regulations software programs.

Objective: Upon completion of this course, participants will have an understanding of how to conduct a compliance review of a motor carrier's operations in a manner that assures that no violations are missed, overlooked, or unrecorded.

Length: 80 hours

[510004] Enforcement Procedures

Prerequisites for Attendance: Certified Safety Investigators Federal Program Specialists. Host agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations.

Target Audience: Certified Safety Investigators; Safety Inspectors, Safety Auditors and Federal Program Specialists



Description: This course is designed to ensure that all professional/technical personnel in the Motor Carrier Compliance and Enforcement Program have a uniform understanding of the relationship between the Federal Motor Carrier Safety and the Hazardous Materials (HM) regulations and the various requirements of proof necessary to sustain successful prosecution of alleged violations of those regulations.

Objective: Upon completion of the course, the participants should have a better understanding of: 1. evidence needed to prove various types of violations; 2. how and where evidence may be obtained; 3. alternate means of providing violations where documentary evidence is not available; 4. investigative procedures and the techniques and evidence necessary to proceed under any of the enforcement remedies used, i.e., civil forfeiture, criminal prosecution, and compliance orders. 5. intervention proceedings on permanent authority applications and preparation of case work for such proceedings.

Length: 40 hours

[510026] Household Goods Compliance and Enforcement

Prerequisites for Attendance: Course attendance is limited to Safety Investigators and Household Good Specialists. Host agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations.

Target Audience: Safety Investigators and personnel who have professional and technical responsibilities in implementing compliance and enforcement programs (i.e. Federal Program Specialist)

Description: The Household Goods Compliance and Enforcement Course is designed to utilize an interactive instructional approach between instructor and student. The course incorporates techniques that will require the students to become familiar with the current regulations and Field Office Training Manual procedures. In addition to the basic course material, the course utilizes class participation projects as a part of each chapter, a performance based work project and a 50-question test.

Objective: The course includes the following major components: Background of HHG transportation; Commercial regulations general overview; Part 375 - Transportation of Household Goods in Interstate Commerce; Consumer Protection Regulations overview; Compliance Review / Enforcement Household Goods Motor Carrier - FOTM; Performance based work project; and test questions.

Length: 32 hours

[510022] New Entrant Safety Audit Course

Prerequisites for Attendance: Successful completion of North American Standard Part A, North American Standard Part B and General Hazardous Materials courses. Working knowledge of computer software/hardware. Host agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations and Hazardous Materials Regulations.

Target Audience: Federal and State MCSAP personnel responsible for conducting Safety Audits.

Description: A Safety Audit is an examination of a motor carrier's operation that provides educational and technical assistance on safety and the operational requirements of the Federal Motor Carrier Safety Regulations (FMCSR) and applicable Hazardous Materials Regulation (HMR), and to gather critical safety data needed to make an assessment of the carrier's safety performance and basic safety management controls. Safety audits do not result in safety ratings. Participants will utilize software programs specific to the Safety Audit program.



Objective: To complete a quality safety audit in accordance with the FMCSR and HMR while applying the standards of the Field Operations Training Manual.

Length: 80 hours

[510021] New Entrant Safety Audit Workshop

Prerequisites for Attendance: Successful completion of Compliance Review, North American Standard Part A, North American Standard Part B and General Hazardous Materials courses. Working knowledge of computer software/hardware. Host agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations.

Target Audience: Individuals who have successfully completed the Compliance Review course currently certified to conduct Compliance Reviews who now have the responsibility to conduct Safety Audits.

Description: A Safety Audit is an examination of a motor carrier's operations that provides educational and technical assistance on safety and the operational requirements of the Federal Motor Carrier Safety Regulation (FMCSR) and applicable Hazardous Materials Regulation (HMR), and to gather critical safety data needed to make an assessment of the carrier's safety performance and basic safety management controls. Safety audits do not result in safety ratings. Participants will utilize software programs specific to the Safety Audit Program.

Objective: To complete a quality Safety Audit in accordance with the FMCSR and HMR while applying the standards of the Field Operations Training Manual.

Length: 16 hours

Hazardous Materials [530022] Cargo Tank Inspection

Prerequisites for Attendance: Inspectors shall possess a Certificate of Proficiency for conducting the North American Standard Level I Inspection, North American Standard Part A and Part B Inspections, North American Standard Hazardous Materials/Transportation of Dangerous Goods Inspections. Host Agencies shall provide students with (or require students to bring) the most current version of the Hazardous Materials Regulations.

Target Audience: Federal, State MCSAP or local law enforcement personnel responsible for conducting Cargo Tank inspections.

Description: This course is designed to train inspection personnel to inspect Cargo Tank motor vehicles transporting hazardous materials for compliance with Hazardous Material Regulations either on the roadside or at a carrier's or shipper's place of business.

Objective: Upon successful completion of this course, participants will be able to carry out HM field activities in a manner that complements national HM program goals in a specialized area.

Length: 32 hours

[530001] General Hazardous Materials

Prerequisites for Attendance: Successful completion of at least one of the North American Standard Levels of Inspection (Levels I through V).



Target Audience: Federal, State MCSAP and local law enforcement personnel.

Description: Provides instruction on the laws and the organizations responsible for the regulation of the transportation of hazardous materials (HM). This course is designed to train personnel to inspect HM shipments for compliance with Hazardous Materials Regulations, either on the roadside or at a carrier's or shipper's place of business. Participants are given opportunities to practice the job functions related to the regulation of HM.

Objective: Upon completion of this course, participants will understand the operational use of the Hazardous Materials Table (§172.01) as well as shipping paper and placarding requirements. They will also be introduced to FMCSA/CVSA Hazardous Materials Out-of-Service criteria.

Length: 40 hours

[530023] Other Bulk Packaging

Prerequisites for Attendance: Inspectors shall possess a Certificate of Proficiency for conducting North American Standard Level 1 Inspection, North American Standard Hazardous Materials/Transportation of Dangerous Goods Inspections and North American Standard Cargo Tank Inspections. Host Agencies shall provide students with (or require students to bring) the most current version of the Hazardous Materials Regulations.

Target Audience: Federal, State MCSAP or local law enforcement personnel responsible for conducting Other Bulk Packaging inspections.

Description: This course has been designed to train inspection personnel to inspect Other Bulk Packaging, transporting hazardous materials for compliance with Hazardous Material Regulations either on the roadside or at a carrier's or shipper's place of business.

Objective: Upon successful completion of this course, participants will be able to carry out HM field activities in a manner that complements national HM program goals in a specialized area.

Length: 32 hours

Roadside [510001] North American Standard - Part A

Prerequisites for Attendance: None.

Target Audience: Federal, State MCSAP or local law enforcement personnel responsible for conducting driver inspections.

Description: This course is designed to provide Federal, State MCSAP and local law enforcement personnel with the basic knowledge, skills, practices, and procedures necessary for performing driver inspections under the Motor Carrier Safety Assistance Program. Referred to as North American Standard Inspections, the course will focus on understanding federal regulations and applying them during a safety inspection of commercial motor vehicle operators.

Objective: This course will instruct participants how to conduct a complete North American Standard driver inspection in accordance with the Federal Motor Carrier Safety Regulations and the North American Standard Inspection Procedure. Upon completion of the course, participants will be able to perform a thorough inspection of a commercial motor vehicle operator.



Length: 40 hours

[510002] North American Standard - Part B

Prerequisites for Attendance: Host Agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations with interpretations.

Target Audience: Federal, State MCSAP or local law enforcement personnel responsible for conducting commercial motor vehicle inspections.

Description: This course is designed to provide Federal, State MCSAP and local law enforcement personnel with the basic knowledge, skills, practices, and procedures necessary for performing vehicle inspections under the Motor Carrier Safety Assistance Program. Referred to as North American Standard Inspections, the course will focus on understanding federal regulations and applying them during a safety inspection of commercial motor vehicles.

Objective: This course will instruct participants how to conduct a complete North American Standard vehicle inspection in accordance with the Federal Motor Carrier Safety Regulations and the North American Standard Inspection Procedure, incorporating knowledge that was obtained during the NAS Part A course. Upon completion of the course, participants will be able to perform a thorough examination of a commercial motor vehicle.

Length: 40 hours

[38162] North American Standard Level I Inspection Review

Prerequisites for Attendance: Participants must have completed North American Standard Part A, North American Standard Part B, and have at least 1 year of inspection experience. Host Agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations with interpretations.

Target Audience: Federal, State MCSAP or local law enforcement personnel responsible for conducting driver and vehicle inspections.

Description: Participants will review and update their understanding of North American Standard Part A, and North American Standard Part B inspection processes and requirements. This course is designed to provide Federal, State MCSAP and local law enforcement personnel with a knowledge and skills check of practices and procedures necessary for performing complete North American Standard Level 1 inspections under the Motor Carrier Safety Assistance Program. The course focuses on understanding and applying the most recent federal regulations in performance of a safety inspection of commercial motor vehicles and their drivers.

Objective: Upon completion of the course, participants will have updated their understanding of the NAS Standard inspection process.

Length: 40 hours

[510009] Passenger Vehicle Inspection



Prerequisites for Attendance: Successful completion of the North American Standard Level I course. Host Agencies shall provide students with (or require students to bring) the most current version of the Federal Motor Carrier Safety Regulations with interpretations.

Target Audience: Federal, State MCSAP or local law enforcement personnel responsible for conducting roadside inspections.

Description: This course will provide participants with the knowledge, skills, and ability to safely inspect a passenger-carrying vehicle in accordance with the Federal Motor Carrier Safety Regulation and the North American Standard Level I Passenger Vehicle Inspection Procedures.

Objective: This training will focus on the passenger-carrying vehicle inspection, identifying the special equipment necessary for inspecting passenger-carrying vehicles, determining the applicability of the Federal Motor Carrier Safety Regulation for different types of passenger operations, identifying the mechanical and component differences between a truck and passenger-carrying vehicle, describing the methods for performing the undercarriage inspection of the passenger-carrying vehicle, and describing the proper location to place the CVSA decal. Upon completion of this course, participants will be able to inspect passenger-carrying vehicles in accordance with the safety regulations while assuring the safety of passengers and the motoring public.

Length: 24 hours

Instructor [48161] Instructor Development

Prerequisites for Attendance: It is highly encouraged that Agencies provide candidates with the opportunity to observe classes they are interested in teaching prior to starting the certification process. New Instructors must possess a minimum of 2 years of active/concurrent certification in the subject area of which candidacy to instruct is requested. Applicants must submit proof of meeting required prerequisites, as well as pass a subject matter pretest.

Target Audience: NTCs Instructor Certification Process is open to FMCSA and State personnel who have been approved for technical competency and subject matter expertise by the appropriate FMCSA and/or State Lead MCSAP Agency and validated by NTC.

Description: This course will provide new and experienced instructors the knowledge and skills to deliver more effective training.

Objective: The course is designed to prepare participants to teach on behalf of the National Training Center and will focus on: • Approved methodologies and techniques. • Course delivery with emphasis on uniformity, integrity and quality of instruction. • The five steps in the ISD system • Behavioral learning outcomes • Forms of interactivity and positive interpersonal skills • Training techniques • Three styles of learning • Application of adult learning through recorded training sessions.

Length: 40 hours

Post-Requirements: Upon completion of the course, candidates must: • Pass a formal evaluation by a Master Instructor • Remain current in their field of expertise • Actively present instruction in their topic a minimum of 2 times per year (at least 1 out of state) • Maintain current regulatory training requirements and certifications • Maintain positive evaluations

[48160] Master Instructor Development



Prerequisites for Attendance: Participants must have a minimum of two years as an NTC certified instructor and taught a minimum of 10 safety program classes. A minimum of one instate and one out-of-state safety program classes taught per year is required.

Target Audience: Certified NTC instructors.

Description: This class will open to NTC certified instructors who wish to become Master Instructors. The class will include four days of skill building in effective training techniques as well as instruction on evaluating instructor candidates. After successful completion of this course, participants will be certified as NTC Master Instructors and be able to evaluate instructor candidates in order for them to fulfill their certification requirements.

Objective: Upon completion of the course, participants will be able to: •Explain the five steps in the ISD system •Write a behavioral learning objective •Present, measure, and review a learning objective •Demonstrate at least two forms of interactivity and positive interpersonal skills •List five training techniques •Demonstrate how to reach the three styles of learning •Learn streamlined coaching and mentoring techniques

Length: 40 hours



Utah Leadership Institute (ULI) Catalog Contents by Group:

(A state provided repository of contracted course writers and instructors available for a price to deliver classes on a variety of topics.)

Courses and Workshops

MCD employees can register for courses and workshops offered by a select number of contract providers retained by the Department of Human Resource Management (DHRM) which can be held at our locations. Course descriptions can be found on the DHRM web site.

Customized Training

Unique business and management skills training can be customized and requested of these same contract providers for the MCD.

Motor Carrier Division (MCD) e-Learning Contents:

(Instructional material and content designed and created by MCD personnel for delivery to Division employees, temporary or fulltime.)

CSA 2010

Prerequisites for Attendance: None.

Target Audience: MCD employees, Agents, Inspectors, and Investigators.

Description: This course is a brief overview of changes to the way Commercial Motor Vehicle Analysis is conducted. Also, this session compares it to the SafeStat system currently in operation and introduces the implementation schedule.

Objective: This course will instruct participants in the changes being made to the inspection and investigation practices required by federal policy.

Length: 20 minutes

Intermodal Equipment Provider (IEP)

Prerequisites for Attendance: None.

Target Audience: MCD Inspectors, and Investigators.

Description: This course is an overview and description of the new Intermodal Equipment Provider Rule and how to recognize the correct intermodal chassis equipment (IME) number. It will also introduce the two new, additional questions to be asked during a driver interview.

Objective: This course will instruct participants regarding new requirements for inspecting and evaluating intermodal chassis equipment.

Length: 20 minutes



Size Evaluation

Prerequisites for Attendance: None.

Target Audience: MCD temporary employees, employees and Agents.

Description: This online course provides background and detailed reasons why the evaluation of size within the motor carrier industry is important as it related to the three-fold mission of the Division; to promote and assist in operating on the roads safely, protecting Utah's highway infrastructure and facilitating commerce. Also, participants are provided the sizes of various types of vehicles and loads that are to be regulated and where needed, permitted.

Objective: This course will instruct participants regarding the application of size restrictions and applications for regulating vehicles of the motor carrier industry on Utah's roadways.

Length: 5 hours

Weight Evaluation

Prerequisites for Attendance: None.

Target Audience: MCD temporary employees, employees and Agents.

Description: This online course provides background and detailed reasons why the evaluation of weight within the motor carrier industry is important as it related to the three-fold mission of the Division; to promote and assist in operating on the roads safely, protecting Utah's highway infrastructure and facilitating commerce. Also, participants are provided the weight for various types of vehicle configurations and load types that are to be regulated and where needed, permitted.

Objective: This course will instruct participants regarding the application of weight restrictions and applications for regulating vehicles of the motor carrier industry on Utah's roadways.

Length: 5 hours

Department of Aeronautics Course Name: Aircraft Mechanic

Description:

Course Name: Aircraft Pilot Recurrence Training

Description:

Department of Emergency Management

Course Name: Description:

Course Name: Description:

Course Name: Description:



Course Name: Description:

Course Name: Description:

Course Name: Description:

Department of Equipment

No courses are expected to be offered in 2011 -2012.

Department of Traffic Operations

(Note that we have limited funding for the outside trainer and can only handle small numbers and offer only one class session.)

Course Name: Electrical safety and codes

Description: offered for 2011-2012 - for electronic technicians

Course Name: OSHA 10 hour electrical construction

Description: offered for 2011-2012 - for electronic technicians

Course Name: Work zone safety - traffic control for maintenance and construction

Description: offered for 2011-2012 - for electronic technicians

Course Name: Maintenance of traffic signals

Description: offered for 2011-2012 - for electronic technicians

Course Name: Fiber-optic construction and maintenance

Description: offered for 2011-2012 - for electronic technicians

Course Name: UDOT Standard Drawings and Specifications
Description: offered for 2011-2012 - for electronic technicians

Course Name: Construction and inspection of traffic signals **Description:** offered for 2011-2012 - for electronic technicians

Course Name: Traffic signal controllers programming and cabinet wiring and operation

Description: offered for 2011-2012 - for electronic technicians

IDEAL LIST OF ADDITIONAL COURSES - TRAFFIC OPERATIONS DIVISION



The following is a list of courses that the Traffic Operations Division recommends, but which will *not* be offered because of a lack of resources.

Target Audiences: Electronic Technicians

- 1. Basics of Manual of Uniform Traffic Control Devices
- 2. Introduction to electrical construction and maintenance (general audience)
- 3. Advanced electrical construction and maintenance.
- 4. Operation and timing of traffic signals
- 5. Advanced traffic signal detection
- 6. Maintenance of highway lighting
- 7. Advanced fiber-optic IP networks

Target Audience: Traffic engineering personnel:

- 1. Introduction to traffic engineering (general audience)
- 2. Introduction to electrical construction and maintenance (general audience)
- 3. Freeway traffic flow theory
- 4. Intersection traffic flow theory
- 5. Highway capacity analysis freeways, ramps, weaving sections
- 6. Highway capacity analysis intersections
- 7. AASHTO Green Book Policy on Geometric Design of Streets and Highways
- 8. Advanced topics in the MUTCD signing, pavement markings, traffic signal design
- 9. Traffic incident management
- 10. Traffic laws and codes
- 11. Traffic simulation models
- 12. Statistical methods
- 13. Principles and application of access control
- 14. Advanced timing and operation of traffic signals
- 15. Design of highway lighting
- 16. Traffic signal coordination
- 17. Advanced traffic management systems
- 18. Design and operation of innovative intersections (CFI, DDI, BRT, etc.)

Department of Traffic and Safety

Course Name: Description:

Course Name: Description:

Course Name: Description:



Course Name: **Description:**

Course Name: **Description:**

Course Name: Description: